Linear, Certain Sites Only, Standard Genetic Code

Liver Rac GEF Map (1 > 3171) Site and Sequence

All 478 enzymes (No Filter)

Enzymes: Settings:

. Essis

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109 218 436 327 763 654 Thr Arg Arg Lys Ser Ala Ser Asp Gin Trp Asn Thr Asp Asn Glu Pro Ala Lys Val Lys Pro Giu Leu Leu Pro Glu Lys Glu Glu Thr Ser Gin Ala Asp Gin Asp 11e TCACTCAAACCAGTGAAGCTTGGGAAAGTCATTGACCTCCAGTCGTTCTGCTGAGAAACATCTGGCTCTATTTCCATGGAGACCAGGGAATCTGAAGATTTGGAAAAAGA NT AND AND LYS US TO THE TOTAL TOTAL TOTAL TANGAGAAATTCCATCTTCAATCGCTCCATAAGACGCAAAAGCCAAAGGCCAAGGCCAGAGACAACGGAACG Asp Pro Gly Ala Glu Met Ser Glu Ser Ser Thr Pro Gly Asn Gly Ala Thr Pro Glu Glu Trp Pro Ala Leu Ala Asp Ser Pro Thr Thr Leu Thr Glu Ala Leu GCCAGCTGCCTGGCAGATTCACAGGACAATGGAAAATCTGTAAATGAGCCCCTGACCTTGAATATCCCCTGGAGCAGAATGCCTCCTTGCAGAACAGCAATGCAGACAG GCGGATGATCCACCCCATTCCCGCCGACTCCTGGAGAACCTCATTGAACAAATAGGGCTCCTGTATCAGGAATACCGAGATAAATCGACTCTCCAAGAAATCGAAACC Gin Asp Lys Giu Pro His Cys His Ile Pro Ile Lys Arg Asn Ser Ile Phe Asn Arg Ser Ile Arg Arg Lys Ser Lys Ala Lys Ala Arg Asp Asn Pro Giu Arg Asn AUCCAGGÁGCCCAGGAAATGAGTGAGTCGTCCTCCACCCGGGAAATGGGGCCACGCCLGAGGAGTGGCCGGCCCTGGCCGACAGCCCCACCACGTCACCGAGGCCCT Met Glu Thr Arg Glu Ser Glu Asp Leu Glu Lys Ala Ser Cys Leu Ala Asp Ser Gin Asp Asn Gly Lys Ser Val Asn Glu Pro Leu Asn Ile Pro Trp Ser Arg Met Pro Pro Cys Arg Thr Ala Met Gin Thr Arg Met 11e His Pro 11e Pro Ala Asp Ser Trp Arg Asn Leu 11e Glu Gln 11e Gly Leu Leu Tyr Gln Glu Tyr Arg Asp Lys Ser Thr Leu Gln Glu 11e -- Liver Specific Sequence a.a. 1-127 - Liver Specific Sequence --- Liver Specific Sequence - Liver Specific Sequence -a.a. 1-127 a.a. 1-127 a.a. 1-127 -Liver Specific Sequence ■a.a. 1-127

872 TO PTO BILL MY LYS IN LEGITO WILL SO TO TO THE SECOND TO THE SECOND TO BE AND AGENCE TO THE SECOND T CACCAGAGAGGAAGACTCTGCCCCAGATGTGCCTGCTCAGTAACCCCCACTLAAGGTTCAACCTGTGGCAGGATCTTCCCGAGATCCGGAGCAGCAGCGGGGTGCTTGAGAT Pro Pro Glu Arg Lys Thr Leu Pro Gin lie Cys Leu Leu Ser Asn Pro His Ser Arg Phe Asn Leu Trp Gin Asp Leu Pro Giu lie Arg Ser Ser Giy Vai Leu Glu

- Poly-Glutamate Region a.a. 216-226

981

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Bri Ususian Bri	
Leu Gin Pro Giu Giu Ile Lys Leu Gin Giu Ala Met Phe Giu Leu Vai Thr Ser Giu Ala Ser Tyr Tyr Lys Ser Leu Asn Leu Leu Vai Ser His Phe Met Giu Asn GACCGGATAAGGAAGATCCTGCACCCGTCCGAGGCGCACATCCTCTTCTCCAACGTCCTGGACGTGCTGGCTG	
a.a. 273-456 ————————————————————————————————————	う
Val Leu Ala Val Ser Glu Arg Phe Leu Leu Glu Leu Glu His Arg TCTCTGTCTACATCACCTACGTCAGCAATCAGACCTACCAGGAGGG	
a.a. 273-456 ••••• 1199	ത്
he Ser Val Tyr IIe Thr Tyr Val Ser Asn Gln Thr Tyr Gln Glu Arg CGACCCCAAGTGCAGGGGGCTGCCCTTCTCCTCCTTCTCTCTC	
a.a. 273-456	<u>ನ</u>
Thr Tyr Lys Gin Leu teu Gin Giu Lys Ala Ala Phe Arg Giu Leu Ile Ala Gin Leu Giu Leu Asp Pro Lys Cys Arg Giy Leu Pro Phe Ser Ser Phe Leu Ile Leu a.a. 379-402	
CCTTICCAGAGGATCACACGCCICAAGCTGTIGGICCAGAACAICCTGAAGAGGGTAGAAGAGAGGICTGAGGGGGGGGGG	
a.a. 273-456	
Pro 17te Gin Arg Ile Thr Arg Leu Lys Leu Leu Val Gin Asn Ile Leu Lys Arg Val Giu Gra Arg Ser Giu Arg Giu Cys Thr Alg Leu Asp Alg His Lys Giu Lau	
-	
1526 a.a. 273-456 area a.a. 27	χ.
GIU Me. Val Val Lys Ala Cys Asn Glu Gly Val Arg Lys Met Ser Arg Thr Glu Gln Met IIe Ser IIe Gln Lys Lys Met Glu Phe Lys IIe Lys Ser Val Pro IIe IIe CTCCCACTCCCGCTGGCTGAGCAGGGTGAGCTGCAGAGATGTCAGGCCCCAAGACCTCCCGGAGGACCAAGAAAATTTACCTCTTC	
a.a. 487-605	*
L Ser His Ser Arg Trp Leu Leu Lys Gin Giy Giu Leu Gin Met Ser Giy Pro Lys Thr Ser Arg Thr Leu Arg Thr Lys Lys Leu Phe His Giu 11e Tyr Leu Phe CTGTTCAACGACCTGCTGGTGATCTGCCGGCAGATTCCAGGAGACAAGTACCAGGTATTTGACTCAGCGGGGACTGCTGCGTGGAGGGAG	
a.a. 487-605	7
Pleckstrin Homology Domain ————————————————————————————————————	
Leu Phe Asn Asp Leu Leu Val IIe Cys Arg Gin IIe Pro Gly Asp Lys Tyr Gin Val Phe Asp Ser Ala Pro Arg Gly Leu Leu Arg Val Glu Glu Leu Glu Asp Gin GCCAGACGCTGGCCAACGTGTTCATCCTGCGGCTGCTGGAGAACGCAGATGACCGGGAGGCCACCTACATGCTAAAGGCGTCCTCTCAGAGTGAGATGAAGCGTTGGAT	
1960	×

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a.a. 487-605 Personal Plackstrip Homology Domain	
GIY GIN Thr Leu Ala Asn Val Phe Ile Leu Arg Leu Leu Giu Asn Ala Asp Asp Arg Giu Ala Thr Tyr Met Leu Lys Ala Ser Gin Ser Giu Met Lys Arg Trp Met GACCTCACTGGCCCCCAACAGGAGGACCAAGTTTGTTTCGTTLACATCCCGGCTGCTGGGACTGCCCCCAGGTCCAGTGCGTGC	
	1962
Pleckstrin Homology Domain ————————————————————————————————————	
a.a. 608-680 ====================================	2071
GIU LEU Thr LEU GIU LEU Ala Asp IIe LEU Asn IIe LEU Asp Lys Thr Asp Asp Giy Trp IIe Phe Giy Giu Arg Leu His Asp Gin Giu Arg Giy Trp Phe Pro Ser CCATGACTGAGGAGATCTTGAATCCCAAGATCCGGTCCCAGAACCTCAAGGAATGTTTCCGTGTCCACAAGATGATGATGATGACCCTCAGCGCAGAACAAGAAGAGGACCGCA	
	2180
Ser Met Thr Glu Giv IIe Leu Asn Pro Lys IIe Arg Ser Gin Asn Leu Lys Glu Cys Phe Arg Val His Lys Met Asp Arg Arg Arg Arg Arg Arg Arg GAAGCTGGGCAATCGGCAATGACCCCCACCCCACCCCAGGGGCGGGGGGGG	
	2289
	2398
	2507
	2616
	2725
CICTGGCTCCCTGATGGGCTGGATGTAACTTGTGTTCTA3CCCCTTAAGGAGCCCAGGTGTTTTAAGGAATGAATTGGTCACTGCATCTTGTATCGATTATGGTTCT	2834
GAGAAAAGCAAATATCGGAATTCCTGCAGCCCGGGAAATGGGGCCACGCCCGAGGAGTGGCCGGCC	2943
TCCACCCCATTCCCGCCGACTCCTGGAGAAACCTCATTGAACAAATAGGGCTCCTGTATCAGGAATACCGAGATAAATCGACTCTCCAAAAAAAA	3052
_	3161

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GAATTCCCGCAGCCCGTTAGTCGCCCCCGACCCAGGCCCCGGCGTGGCCCCAGACCCGGCCCCAGGCCCGCCC	
	66
Brain Specific Sequence ———————————————————————————————————	-
Glu Phe Pro Gln Pro Val Ser Arg Pro Arg Pro Ser Pro Gly Pro Arg Arg Gly Pro Arg Pro Gly Pro Ser Thr Arg Pro Ala Ala Asp Pro Met	1
AGCTGCTGGCCGCTGCCTTCAGCGCCGCTGCGCCGTGGACCACGACAGTTCCACCTCGGAAAGCGACGCGCGCG	<u> </u>
Brain Specific Sequence	194
Giu Leu Leu Ala Ala Ala Phe Ser Ala Ala Cys Ala Vai Asp His Asp Ser Ser Thr Ser Glu Ser Asp Ala Ara Asp Ser Ala	

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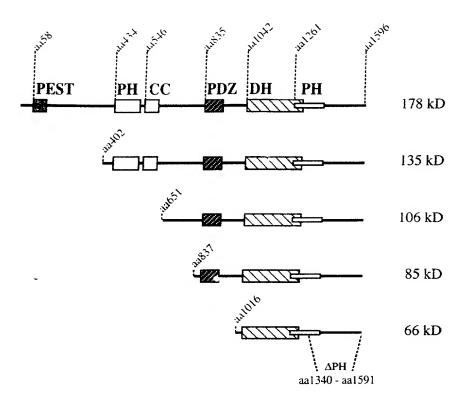


FIGURE 3

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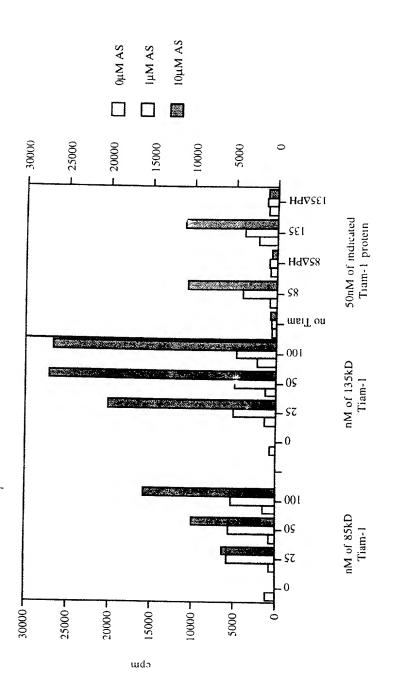
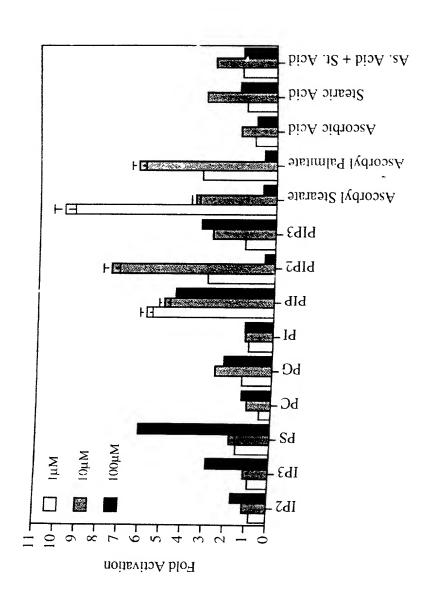


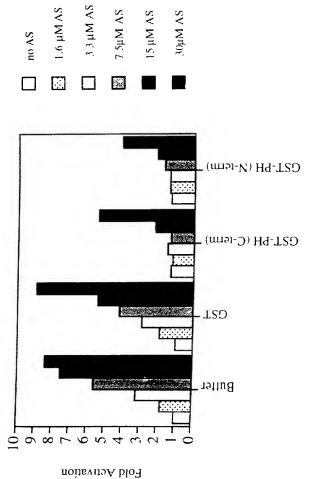
FIGURE 4

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EIGNKE 2

FIGURE 6



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